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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/796,177	0/796,177 03/09/2004		Stephen W. Fesik	7046.US.02	3515
23492	7590	05/12/2005		EXAMINER	
ROBERT DEBERARDINE				CHONG, KIMBERLY	
ABBOTT LA	ABORAT	ORIES			
100 ABBOTT PARK ROAD			ART UNIT	PAPER NUMBER	
DEPT. 377/AP6A				1635	
ABBOTT PARK, IL 60064-6008				DATE MAILED: 05/12/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
Office Action Summan	10/796,177	FESIK ET AL.					
Office Action Summary	Examiner	Art Unit					
	Kimberly Chong	1635					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1) Responsive to communication(s) filed on							
2a) ☐ This action is <b>FINAL</b> . 2b) ☐ This	· · · · · · · · · · · · · · · · · · ·						
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4)⊠ Claim(s) <u>1-5</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6) Claim(s) is/are rejected.							
7) Claim(s) is/are objected to.	')☐ Claim(s) is/are objected to.						
8) Claim(s) <u>1-5</u> are subject to restriction and/or e	lection requirement.						
Application Papers							
9) The specification is objected to by the Examine	r.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)							
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  Pager No(s)/Mail Date							
Notice of Draftsperson's Patent Drawing Review (PTO-948)   Paper No(s)/Mail Date							

## **DETAILED ACTION**

## Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 4 and 5, drawn to an antisense oligonucleotide targeted to tyrosinase,
   classifiable in class 536, subclass 24.5. This group is subject to further restriction.
- II. Claims 1-3, drawn to a method of killing cancer cells, comprising administering an oligonucleotide targeted to a CDK8 gene, classifiable in class 435, subclass 6 and 375.
- III. Claims 1-3, drawn to a method of killing cancer cells, comprising administering an oligonucleotide targeted to a STK33 gene, classifiable in class 435, subclass 6 and 375.
- IV. Claims 1-3, drawn to a method of killing cancer cells, comprising administering an oligonucleotide targeted to a PRKCM gene, classifiable in class 435, subclass 6 and 375.
- V. Claims 1-3, drawn to a method of killing cancer cells, comprising administering an oligonucleotide targeted to a PRKACA gene, classifiable in class 435, subclass 6 and 375.
- VI. Claims 1-3, drawn to a method of killing cancer cells, comprising administering an oligonucleotide targeted to a ACVR1B gene, classifiable in class 435, subclass 6 and 375.

- VII. Claims 1-3, drawn to a method of killing cancer cells, comprising administering an oligonucleotide targeted to a CDK5R1 gene, classifiable in class 435, subclass 6 and 375.
- VIII. Claims 1-3, drawn to a method of killing cancer cells, comprising administering an oligonucleotide targeted to a CDC42BPB gene, classifiable in class 435, subclass 6 and 375.
- IX. Claims 1-3, drawn to a method of killing cancer cells, comprising administering an oligonucleotide targeted to a MPP6 gene, classifiable in class 435, subclass 6 and 375.
- X. Claims 1-3, drawn to a method of killing cancer cells, comprising administering an oligonucleotide targeted to a CDC42BPA gene, classifiable in class 435, subclass 6 and 375.

The inventions are distinct, each from the other because of the following reasons:

Inventions of group I and group II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product oligonucleotide of group I can be used as a probe in *in situ* hybridization, which is materially different than the methods of killing a cancer cell, as present in group II. Furthermore restriction is proper because the subject matter

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is divergent and non-coextensive and a search for one would not necessarily reveal art against the other. It is therefore a burden to search these inventions in a single application.

The methods of groups II-X are all unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different methods are not disclosed as useful together because they have materially different modes of operation with different effects. For example, the genes involved in the methods are all structurally unrelated, have different functions in cells and have different effects. Furthermore restriction is proper because the subject matter is divergent and non-coextensive and a search for one would not necessarily reveal art against the other. It is therefore a burden to search these inventions in a single application.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Furthermore, should applicants elect to prosecute group I or group II, these groups are subject to a further restriction as follows. Claim 5 is subject to an additional restriction since it is not considered to be a proper genus/Markush. See MPEP 803.02 – PRACTICE RE MARKUSH-TYPE CLAIMS – if the members of the Markush group are sufficiently few in number or so closely related that a search and examination of the entire claim can be made without serious burden, the examiner must examine all the members of the Markush group in the claims on the merits, even though they are directed to independent and distinct inventions. In

such a case, the examiner will not follow the procedure described below and will not require restriction. Since the decisions in In re Weber, 580 F.2d 455, 198 USPQ 300 (CCPA 1980); and In re Haas, 580 F.2d 461, 198 USPQ 334 (CCPA 1978), it is improper for the Office to refuse to examine that which applicants regard as their invention, unless the subject matter in a claim lacks unity of invention. In re Harnish, 631 F.2d 716, 206 USPQ 300 (CCPA 1980); and Ex parte Hozumi, 3 USPQ2d 1059 (Bd. Pat. App. & Int. 1984). Broadly, unity of invention exists where compounds included within a Markush group (1) share a common utility, and (2) share a substantial structure feature disclosed as being essential to that utility.

Claim 5 specifically claims oligonucleotides SEQ ID NOS. 1-6 and 11-78, which are targeted to CDK8, STK33, PRKCM, PRKACA, ACV1B, CDK5R1, CDC42BPB, MMP6 and CDC42BPA. Although the oligonucleotide sequences claimed each target gene believed to be involved in cancer, the instant oligonucleotide sequences are considered to be unrelated, since each oligonucleotide sequence claimed is structurally and functionally independent and distinct for the following reasons: each oligonucleotide sequence has a unique nucleotide sequence and each oligonucleotide sequence targets a different region of a gene or a different gene entirely. As such the Markush/genus of antisense sequences in claim 5 are not considered to constitute a proper genus, and are therefore subject to restriction. Furthermore, a search of more than one (1) of the antisense sequences claimed in claim 5 presents an undue burden on the Patent and Trademark Office due to the complex nature of the search and corresponding examination of more than one (1) of the claimed antisense sequences. In view of the foregoing, one (1) antisense sequence is considered to be a reasonable number of sequences for examination.

Accordingly, applicants are required to elect a total of one (1) antisense sequence from claim 5. Note that this is not a species election.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. Process claims that depend from or otherwise include all the limitations of the patentable product will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of In re Ochiai, In re Brouwer and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy. Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the

product claims or to otherwise include the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly Chong whose telephone number is 571-272-3111. The examiner can normally be reached Monday thru Friday between 7-4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John LeGuyader can be reached at 571-272-0760. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as

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general patent information available to the public. For more information about the PAIR system, see http://pair-direct.uspto.gov.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

Kimberly Chong Examiner Art Unit 1635

SEAN McGARRY
PRIMARY EXAMINER

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